

For more detailed installation, configuration, programming, file transfer, and operating instructions, refer to the *1200V-Series Modero Touch Panels Instruction Manual* available on-line at www.amx.com.



FIG. 1 Sample Wall Mount and Table Top 1200V Touch Panels

ATTENTION!

Verify you are using the latest NetLinX Master and Modero touch panel firmware (available from www.amx.com). Verify the TPDesign4 program being used is **Version 2.6** or higher.

Overview

The new 12" Modero Touch Panels (NXT/NXD-1200V) feature dual USB connectivity for mouse and keyboard, as well as Composite/S-Video support. The following is a listing of the currently available 1200V panels:

- **NXD-1200V (FG2251-60K)** - 12" Modero Video WallMount touch panel Kit
- **NXT-1200V (FG2250-60K)** - 12" Modero Video Table Top touch panel Kit

Specifications

1200V Specifications	
Dimensions (HWD):	<ul style="list-style-type: none"> NXD-1200V (with faceplate): 12.38" x 12.59" x 3.25" (31.43 cm x 31.97 cm x 8.25 cm) NXT-1200V (Fully raised): 10.91" x 12.34" x 12.50" (27.70 cm x 31.33 cm x 31.75 cm) NXT-1200V (Fully lowered): 6.77" x 12.34" x 12.50" (17.20 cm x 31.33 cm x 31.75 cm) CB-TP12 (conduit/wallbox): 11.52" x 11.60" x 3.50" (29.27 cm x 29.47 cm x 8.89 cm) MB-TP12 (VESA mounting box): 12.37" x 12.58" x 3.52" (31.42 cm x 31.95 cm x 8.94 cm)
Power:	<ul style="list-style-type: none"> Constant current draw: 2.1 A @ 12 VDC (stand-alone) Startup current draw: 3.2 A @ 12 VDC (stand-alone)
Minimum power supply required:	<ul style="list-style-type: none"> PSN4.4 Power Supply (FG423-45) - using accessories can increase the power draw requirements.
Memory:	<ul style="list-style-type: none"> 256 MB on-board memory 128 MB Compact Flash (upgradeable to 1 GB factory programmed)
Weight:	<ul style="list-style-type: none"> NXD-1200V: 10.80 lbs (4.90 kg) NXT-1200V: 10.80 lbs (4.90 kg)
LCD Parameters:	<ul style="list-style-type: none"> Aspect Ratio: 4:3 Brightness (luminance): 250 cd/m² Channel transparency: 8-bit Alpha channel transparency Contrast ratio: 300:1 Display area (HW): 183.10 mm x 247.40 mm Display colors: 256K (18-bit color depth) Dot/Pixel pitch: 0.297 mm Screen resolution (HV): 800 x 600 pixels Video formats: NTSC, PAL, and SECAM (shown within variable-size video windows)
Viewing Angles:	<ul style="list-style-type: none"> Vertical: + 80° (up from center) and - 80° (down from center)
Supported Audio Sample Rates:	<ul style="list-style-type: none"> 48000Hz, 44100Hz, 32000Hz, 24000Hz, 22050Hz, 16000Hz, 12000Hz, 11025Hz, and 8000Hz.
Certifications:	<ul style="list-style-type: none"> FCC Part 15 Class B, CE, and EN 60950
Front Panel Components:	<ul style="list-style-type: none"> Light Sensor: Photosensitive light detector for automatic adjustment of the panel brightness Motion Sensor (PIR): Proximity Infrared Detector to wake the panel when panel is approached Front Setup Access Button: Pushbutton (grey) used to either put the panel into a "sleep" or "wake" state Microphone: Used for intercom applications Speakers: Stereo output with a frequency response of 450 Hz - 7 KHz

1200V Specifications (Cont.)

Rear Panel Components:	<ul style="list-style-type: none"> Audio/Video Connector: RJ-45 connector for communication of differential audio/video signals Ethernet 10/100 Port: RJ-45 port for 10/100 Mbps communication PWR Connector: 2-pin 3.5 mm mini-Phoenix connector Stereo Output Connector: Stereo output through a 3.5mm mini-jack USB Connector: Two Type A USB ports Mini-USB Connector: 5-pin Mini-USB connector
Operating/Storage Environments:	<ul style="list-style-type: none"> Operating Temperature: 10° C (50° F) to 40° C (104° F) Operating Humidity: 20% to 85% RH Storage Temperature: -20° C (-4° F) to 60° C (140° F) Storage Humidity: 5% to 85% RH
Included Accessories:	<ul style="list-style-type: none"> Installation Kit for 12" and 17" NXD panels (KA2251-01): <ul style="list-style-type: none"> 2-pin mini-Phoenix connector (41-5025) Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) One CAT5 Suppression Ferrites (04-0014) Four Drywall clips (62-5924-05) and #6 -metal strips (80-0192) Installation Kit for 12" NXT panels (KA2251-03): <ul style="list-style-type: none"> 2-pin mini-Phoenix connector (41-5025) Three Phillips-head screws (#4-20 x 0.250 Black) (80-0114-08) Two CAT5 Suppression Ferrites (04-0014) Modero Table Top Cable (CA2250-50) <ul style="list-style-type: none"> provided with all NXT Table Top panels. NXA-AVB/ETHERNET Breakout Box (FG2254-10)
Other AMX Equipment:	<ul style="list-style-type: none"> CB-TP12 Conduit/Wallbox (FG031-10) CC-USB (Type A) to Mini-B 5-Wire programming cable (FG10-5965) Kensington Lock Bracket (FG2259-10) (optional only with NXTs) MB-TP12 Universal VESA Mounting Box for NXD panels (FG031-50): <ul style="list-style-type: none"> Black metallic VESA back box (62-0031-50) Black plastic cover (with grommet opening) (60-0031-50) Strain relief grommet (45-0004-03) Four Phillips pan-head screws (#8-32 x 0.50 Black) (80-0146-02) Twelve Under-cut Phillips-head screws (#6-32 x 0.500 Black) (80-0139) NXA-BASE/B (FG2255) NXA-PCI80211G Wireless Card (FG2255-04) NXA-RK12 Rackmount kit for 12" Wall Mount panels (FG2904-50) NXT-BP (FG2250-10) NXT-CHG (FG2250-50) PSN4.4 Power Supply (12 VDC) (FG423-45) PSN6.5 Power Supply (12 VDC) (FG423-41) Upgrade Compact Flash (factory programmed with firmware): <ul style="list-style-type: none"> NXA-CFTPV256M - 256 MB V/VG compact flash card (FG2116-43) NXA-CFTPV512M - 512 MB V/VG compact flash card (FG2116-44) NXA-CFTPV1G - 1 GB V/VG compact flash card (FG2116-45)

Panel Connectors

FIG. 2 shows the connectors located on the 1200V Modero Video panels. The Audio/Video RJ-45 connector provides differential audio/video signals between the touch panel and the NXA-AVB/ETHERNET. This connector routes Composite video, Stereo (left/right) audio, and microphone audio.

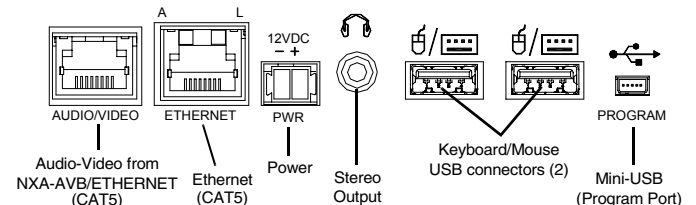


FIG. 2 Connector layout on the 1200V Touch Panels

NXA-AVB/ETHERNET Breakout Box

FIG. 3 shows the front and rear connectors on the NXA-AVB/ETHERNET breakout box. This breakout box can be mounted on either a horizontal flat surface or in an equipment rack (by removing the front faceplate and securing it to an (optional) AC-RK Rack Kit).

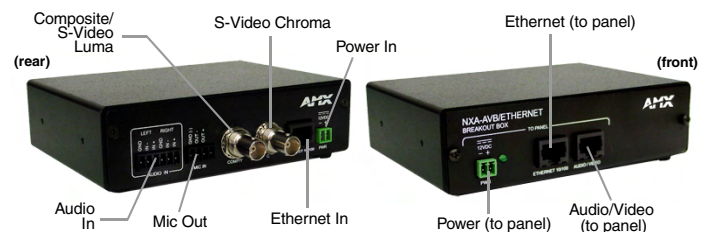


FIG. 3 Connector layouts on the NXA-AVB/ETHERNET Breakout Box

Wiring the NXA-AVB/ETHERNET Connectors and Cables

The inputs and outputs on the breakout box are separated into front and rear connectors. The rear connectors are used to input external signals. The front connectors are used to communicate signals between the NXA-AVB/ETHERNET and a target Modero panel. FIG. 4 provides a layout of the wiring connection both into and from the breakout box. **Power should be applied to the NXA-AVB/ETHERNET only after all connections have been secured onto both the breakout box and the target panel.**

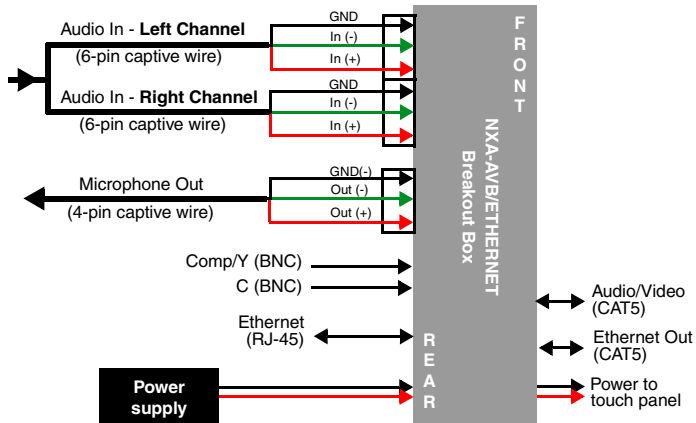


FIG. 4 NXA-AVB/ETHERNET Breakout Box connector wiring diagram

Use a standard CAT5 Ethernet cable (connected to the rear of the Table Top Panel or to the side of the Wall Panel) to provide both communication and 10/100 network connectivity between the panel, breakout box, NetLinX Master, and the network. The rear-panel wiring connections are described below (from left to right):

- AUDIO IN:** 6-pin mini-Phoenix connector, divided into left and right audio channels. Each channel is divided into GND, IN+, and IN- terminal cable connectors (2 sets of 3 for each channel).
- MIC OUT:** 4-pin mini-Phoenix connector, divided into GND, OUT-, and OUT+ terminal connectors.
- Video In BNCs:** Feeds either Composite/S-Video Luma or S-Video Chroma signals into the NXA-AVB/ETHERNET. This feed is then redirected out to a Modero panel through the front Audio/Video CAT5 port.
- ETHERNET:** RJ-45 connector routes data to the G4 touch panel through the front Ethernet port. These connections use a standard CAT5 Ethernet cable to provide communication between the target touch panel, Breakout Box, and NetLinX Master.
- PWR** 2-pin mini-Phoenix connector that connects to a PSN power supply. This port can be used to provide power to a Modero panel by sending it through the NXA-AVB/ETHERNET (rear power connector through to the front power connector).

Wiring for Unbalanced Audio

Use FIG. 5 to configure an unbalanced audio connection.

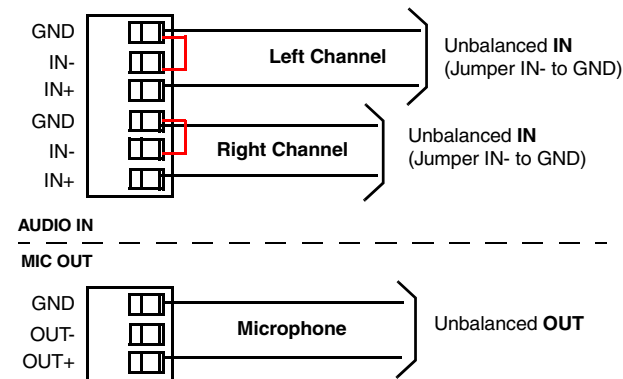


FIG. 5 Wiring the rear AUDIO IN and MIC OUT for use with Unbalanced Audio

Wiring for Balanced Audio

Use FIG. 6 to configure a balanced audio connection.

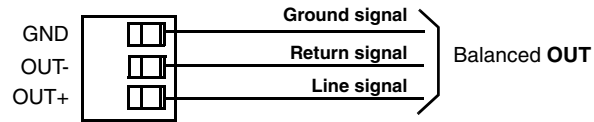


FIG. 6 Wiring the rear AUDIO IN and MIC OUT for use with Balanced Audio

Modero Setup and System Connection

- Carefully remove the panel from the shipping box, peel the protective plastic cover from the LCD and apply power to the panel.
- From below the LCD, press the grey Front Setup Access button for 6 seconds (passing-over the Setup page) to access the Calibration setup page and follow the on-screen instructions.
- Press the grey Firmware Setup Access button for 3 seconds to open the Setup page and touch the on-screen **Protected Setup** button.
- Enter the panel password into the keypad (default is **1988**).
- Press the *Device Number* field to open the on-screen Device Number keypad and enter a value for the panel (*default is 10001*).
- Press **Done** when finished and press the on-screen **Reboot** button to cycle power to the panel.
- Repeat step 3 to access the Protected Setup page and touch the **System Settings** button to open the System Settings page (FIG. 7).

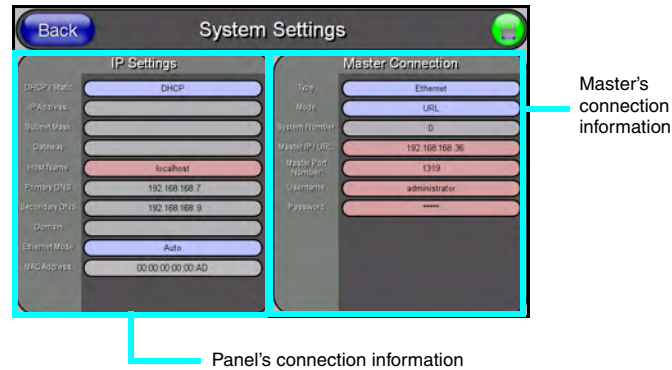


FIG. 7 Sample System Settings page

- Toggle the *Type* field to **Ethernet**.
- Enter both the System Number and IP Address of the target Master.
- Enter a valid Username and/or Password if the target Master is secured.
- Press the **Back** button and then press the on-screen **Reboot** button to save the changes and cycle power.